

In the ClaimsClaim 1 (currently amended):

An isolated polynucleotide sequence obtained from *Chlamydia trachomatis* comprising a polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1089, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167; or

~~an isolated polynucleotide sequence encoding a polypeptide that has at least 80% homology to a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167.~~

Claim 2 (currently amended):

An isolated polynucleotide sequence that hybridizes to a *Chlamydia trachomatis* polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1089, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167, under conditions of high stringency, wherein said hybridizing polynucleotide sequence is complementary to a polynucleotide sequence that encodes a polypeptide having at least 80% homology to a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167; or wherein said hybridizing polynucleotide sequence is complementary to a polynucleotide sequence that encodes a polypeptide identical to SEQ ID NO. 1089.

Claim 3 (currently amended):

An isolated polynucleotide sequence that hybridizes to a *Chlamydia trachomatis* polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1089, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167; under

~~conditions of intermediate stringency, wherein said hybridizing polynucleotide sequence is complementary to a polynucleotide sequence that encodes a polypeptide having at least 80% homology to a polypeptide selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, and SEQ ID NO. 1167; or wherein said hybridizing polynucleotide sequence is complementary to a polynucleotide sequence that encodes the polypeptide of SEQ ID NO. 1089.~~

Claims 4-7 (canceled)

Claim 8 (previously presented):

A polynucleotide encoding a fusion protein, comprising a polynucleotide according to Claim 1, 2, or 3 ligated in frame to a polynucleotide encoding a heterologous polypeptide.

Claim 9 (previously presented):

A recombinant vector that contains the polynucleotide of Claims 1, 2, or 3.

Claim 10 (original):

A recombinant vector that contains the polynucleotide of Claim 8.

Claim 11 (previously presented)

A recombinant vector that contains the polynucleotide of Claim 1, 2, or 3, operatively associated with a regulatory sequence that controls gene expression.

Claim 12 (original):

A recombinant vector that contains the polynucleotide of Claim 8 operatively associated with a regulatory sequence that controls gene expression.

Claim 13 (previously presented):

A genetically engineered host cell that contains the polynucleotide of Claim 1, 2, or 3, or a recombinant vector according to Claims 10 or 12.

Claim 14 (previously presented):

A genetically engineered host cell that comprises the polynucleotide of Claim 8, or a recombinant vector according to Claims 10 or 12.

Claim 15 (original):

A genetically engineered host cell that contains the polynucleotide of Claim 1, 2, or 3 operatively associated with a regulatory sequence that controls gene expression in the host cell.

Claim 16 (original):

A genetically engineered host cell that contains the polynucleotide of Claim 8 operatively associated with a regulatory sequence that controls gene expression in the host cell.

Claims 17-29 (canceled)

Claim 30 (original):

A DNA chip containing an array of polynucleotides comprising at least one of the polynucleotides of Claim 1, 2, or 3.

Claims 31-50 (canceled)

Claim 51 (original):

A kit comprising a container containing an isolated polynucleotide of Claim 1, 2, or 3.

Claim 52 (original):

The kit of Claim 51 wherein the polynucleotide is a primer or a probe.

Claims 53-56 (withdrawn)

Claim 57 (previously presented):

An isolated polynucleotide comprising a polynucleotide that encodes a polypeptide sequence selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1089, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, or SEQ ID NO. 1167 wherein the polynucleotide that encodes the polypeptide sequence has the polynucleotide sequence of the genomic DNA obtainable from ECACC Deposit No. 98112618.

Claim 58 (previously presented):

An isolated polynucleotide sequence comprising a polynucleotide sequence that encodes a polypeptide sequence selected from the group consisting of SEQ ID NO. 1083, SEQ ID NO. 1089, SEQ ID NO. 1091, SEQ ID NO. 1095, SEQ ID NO. 1096, SEQ ID NO. 1105, SEQ ID NO. 1117, SEQ ID NO. 1140, SEQ ID NO. 1159, or SEQ ID NO. 1167, wherein the polynucleotide that encodes the polypeptide sequence has the polynucleotide sequence of the clone DNA obtainable from ECACC Deposit No. 98112617.

Claim 59 (currently amended):

An isolated polynucleotide sequence comprising:

- a) nucleotides 78482 to 78736 of SEQ ID NO: 1 (ORF 1083);
- b) the polynucleotide sequence complementary to the full length of a polynucleotide sequence complementary to nucleotides 112069 to through 111734 of SEQ ID NO: 1 (ORF 1089);
- c) the polynucleotide sequence complementary to the full length of a polynucleotide sequence complementary to nucleotides 114017 to through 113715 of SEQ ID NO: 1

(ORF 1091);

d) nucleotides 144164 to 144427 of SEQ ID NO: 1 (ORF 1095);

e) the polynucleotide sequence complementary to the full length of a polynucleotide sequence complementary to nucleotides 150698 to through 150369 of SEQ ID NO: 1 (ORF 1096);

f) t the polynucleotide sequence complementary to the full length of a polynucleotide sequence complementary to nucleotides 197313 to through 197083 of SEQ ID NO: 1 (ORF 1105);

g) nucleotides 303155 to 303469 of SEQ ID NO: 1 (ORF 1117);

h) nucleotides 467981 to 468262 of SEQ ID NO: 1 (ORF 1140);

i) nucleotides 610110 to 310391 of SEQ ID NO: 1 (ORF 1159); or

j) the polynucleotide sequence complementary to the full length of a polynucleotide sequence complementary to nucleotides 679528 to through 679253 of SEQ ID NO: 1 (ORF 1167);

k) ~~a polynucleotide encoding claim 59(a) through claim 59(l) fused, in frame, to a heterologous polynucleotide sequence; or~~

l) ~~a polynucleotide according to claim 59(a) through claim 59(k) operatively associated with a regulatory sequence that controls gene expression.~~

Claim 60 (currently amended):

A recombinant vector comprising a polynucleotide according to claim 59(a) through claim 59(l).

Claim 61 (previously presented):

A genetically engineered host cell comprising a recombinant vector according to claim 60.

Claim 62 (currently amended):

A DNA chip comprising a polynucleotide according to claim 59(a) through claim 59(i).

Claim 63 (new):

A polynucleotide encoding a fusion protein comprising a polynucleotide according to claim 59 ligated in frame to a polynucleotide encoding a heterologous polypeptide.

Claim 64 (new):

A recombinant polynucleotide comprising a polynucleotide according to claim 59 operatively associated with a regulatory sequence that controls gene expression.

Claim 65 (new):

A recombinant polynucleotide comprising a polynucleotide according to claim 63 operatively associated with a regulatory sequence that controls gene expression.